



# भारत का राजपत्र The Gazette of India

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No. 28] NEW DELHI, SATURDAY, JULY 12, 1986 (ASADHA 21, 1908)

इस भाग में भिन्न पृष्ठ संख्या दी जाती है जिससे कि यह अलग संकलन के रूप में रखा जा सके  
(Separate paging is given to this Part in order that it may be filed as a separate compilation)

## भाग III—खण्ड 2

### [PART III—SECTION 2]

पेटेंट कार्यालय द्वारा जारी की गई पेटेंटों और डिजाइनों से सम्बन्धित अधिसूचना और नोटिस  
[Notifications and Notices issued by the Patent Office relating to Patents and Designs]

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1-147 GI/86

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APPLICATION FOR PATENTS FILED AT THE HEAD OFFICE, 214, ACHARYA JAGADISH BOSE ROAD, CALCUTTA-700017

The dates shown in crescent brackets are the dates claimed under Section 135, of the Act.

The 4th June 1986

- 414/Cal/86 Voest-Alpine Aktiengesellschaft. Lock for the transport of bulk material.
- 415/Cal/86. Koppers Company, Inc. Improved method and apparatus for treating pulp mill black liquor.
- 416/Cal/86. Biogal Gyógyszergyár. Thiazolidinecarboxylic acid derivatives and process for preparing same.
- 417/Cal/86. Hitachi, Ltd. Method of program management for multiple computer system.
- 418/Cal/86. Centro Sperimentale Metallurgico SpA. Hot metal desulphurizing and dephosphorizing process.

The 5th June 1986

- 419/Cal/86. Environmental Elements Corporation. Stepped plenum system.
- 420/Cal/86. Environmental Elements Corporation. Method and system for cleansing a filter bed.
- 421/Cal/86. Trutzschler GmbH & Co. KG. A fixture to drive a sliver loading device for a rotating sliver can, Eg card, drawing.
- 422/Cal/86. Dulal Dutta. An electrical device for determining the day of the week for any past, present or future date.
- 423/Cal/86. Metallurgical & Engineering Consultants (India) Limited. Improved coke oven door and coke ovens having such improved doors.

The 6th June, 1986

- 424/Cal/86. Ram Naresh Singh. Modification in (Hindi) Devanagari Alphabets.
- 425/Cal/86. Vickers, Incorporated. Power Transmission.
- 426/Cal/86. Vickers, Incorporated. Power Transmission.
- 427/Cal/86. Experimentālny Zavod Biokhīmicheskikh Preparatov Instituta Mikrobiologii Imeni Avgusta Kirkhenshteina Akademii Nauk Latvīskoi SSR. Microbiological method for preparation of citric acid.
- 428/Cal/86. Omchandra Kafley. Methods for the manufacture of Okey instant Tea in powder as well as in tablet form.

The 10th June, 1986

- 429/Cal/86. Neste OY. Modified polyolefin and procedure for its manufacturing and its use.
- 430/Cal/86. Richter Gedeon Vegyeszeti Gyar RT. Process for the preparation of 2-halonicergoline derivatives and their acid addition salts and new 2-halonicergolines.
- 431/Cal/86. Fried Krupp Gesellschaft Mit (Beschränkter Haftung). Procedure to remelt scrap or similar thing and fixtures for conducting the procedure.
- 432/Cal/86. The Babcock & Wilcox Company. Vacuum sealing device for insulated steam injection tubing.
- 433/Cal/86. Sunil Jayant Deodhar. A shock proof electric water heater without a safety valve

The 11th June, 1986

- 434/Cal/86. General Mining Union Corporation Limited. Activated rock cutting assembly.
- 435/Cal/86. General Mining Union Corporation Limited. Rock cutting assembly.
- 436/Cal/86. Georg Fischer Aktiengesellschaft. Pipe joint part of plastics.

APPLICATIONS FOR PATENT FILED AT THE PATENT OFFICE BRANCH, MUNICIPAL MARKET BUILDING, 11RD FLOOR, KAROL BAGH, NEW DELHI-110005

The 19th May, 1986

- 442/Del/86. Ashok Kumar Gupta. "Watch-cum-timer".
- 443/Del/86. Shanti Swaroop Kapoor. "Improved double thread weaving machine".
- 444/Del/86. Max J. Ruderian. "Vibratory therapeutic applicator".
- 445/Del/86. Imperial Chemical Industries PLC., "Copolymer production". (Convention date 28th May, 1985) (U.K.).

The 20th May, 1986

- 446/Del/86. Union Carbide Corporation. "Method for controlling secondary top blown oxygen in subsurface pneumatic steel refining".
- 447/Del/86. UOP Inc., "Process and catalyst for the oligomerization of olefins".
- 448/Del/86. Shell Internationale Research Maatschappij B.V., "A process for removing contaminants from a liquid TiCl<sub>4</sub> phase". (Convention date 22nd May, 1985) (U.K.).
- 449/Del/86. Ateliers De Constructions Mecaniques De Vevey S.A., "public transport installation running on a suspended track".

The 21st May, 1986

- 450/Del/86. Thumbuswamy Joseph David, "Paddedroned/mechanised/harvest staker/Raaper".

The 22nd May, 1986

- 451/Del/86. Iqbal Ahmed, "Ignition switch with lock".
- 452/Del/86. Union Carbide Corporation, "Enhanced gas separation process".
- 453/Del/86. The commonwealth Industrial Gases Limited. "Method and apparatus for dividing plant material".
- 454/Del/86. Council of Scientific and Industrial Research. "Micro-processor based control unit for monitoring automated multi electrochemical protection system".

APPLICATIONS FOR PATENTS FILED IN THE PATENT OFFICE BRANCH AT TODI ESTATES, 3RD FLOOR, SUN MILL COMPOUND, LOWER PAREL (WEST), BOMBAY-13

24th April, 1986

- 129/Bom/86. S. S. Dhabadgaonkar. Supriya Tubes and tube modules for high rate clarification of liquid.

25th April, 1986

- 130/Bom/86. Rene Pioch. Transformer tank with cooling by radial and concentric radiators and with a reduced content.
- 131/Bom/86. Swastik Rubber Products Limited. The flexible packing capable of offering pneumatic cushioning as means of shock absorbing material for articles to be transported to long distances.

28th April, 1986

- 132/Bom/86. Kukund Kantilal Shah. Ready to use (concentrated) green mango squash/instant green mango squash.

29th April, 1986

- 133/Bom/86. Hoechst India Ltd. 7-Acyloxy-6-aminoacyloxy-polyoxygenated labdanes, processes for their preparation and their use as medicaments.

134/Bom/86. Douglas C. Brackett. A device for converting linear motion to rotary motion or vice versa.

135/Bom/86. The Associated Cement Companies Limited. Automatic analyser for analysing free lime content in clinker/cement and the like.

30th April, 1986

136/Bom/86. National Peroxide Limited. Process for the preparation of thiourea dioxide.

1st May, 1986

137/Bom/86. Alchemic Research Centre. Improvements in or relating to process for the photo-electrolytic oxidation of a chemical compound.

5th May, 1986

138/Bom/86. Hindustan Lever Ltd. Detergent Granules.

6th May, 1986

139/Bom/86. Bayer (India) Ltd. A process for regeneration of aniline from waste product.

7th May, 1986

140/Bom/86. Hoechst India Ltd. A process for the production of novel antibiotics called Hextamicin A and Hextamicin B from a species. *Micro-monospore* numbered Hoechst India Limited Y-82, 20012, its variants and mutants.

7th May, 1986

141/Bom/86. Hoechst India Limited. A process for the isolation of a novel microbial strain number Y-6670 M and the detection of Cephalosporin C using the same.

#### APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002

19th May, 1986

382/Mas/86 Union Carbide Corporation. A method of preparing a prepreg. (Divisional to Patent Application No. 72/Mas/84).

383/Mas/86. Union Carbide Corporation. A method of preparing a composite. (Divisional to Patent Application No. 72/Mas/84).

20th May, 1986

384/Mas/86. Robert Bosch GmbH. Spark plug for internal combustion engines.

385/Mas/86. Hoechst Aktiengesellschaft. Anode system for the electrolytic production of manganese dioxide.

386/Mas/86. Biogal Gyogyszergyar. Improved process for the preparation of Therapeutically useful, cross-linked dextran grain polymers and therapeutical compositions containing them.

387/Mas/86. Plessey Overseas Limited. Improvements in or relating to telecommunication exchanges. (June 18, 1985; Great Britain).

388/Mas/86. Sony Corporation. A tape loading device for a cassette type tape recording and/or reproducing apparatus.

389/Mas/86. Henkel Kommanditgesellschaft Auf Aktien. The use of monionic surfactants as aids in the flotation of non-sulfidic ores.

21st May, 1986

390/Mas/86. Benne Narasimhamurthy Sridhara. A solar energy linear concentrator and a method of manufacturing the same.

391/Mas/86. Benne Narasimhamurthy Sridhara. A solar energy linear concentrator and a method of manufacturing the same.

392/Mas/86. Union Carbide Corporation. A process for agglomerating mineral ore concentrate utilizing emulsions of polymer binders or dry polymer binders.

393/Mas/86. Union Carbide Corporation. An improved process for agglomerating mineral ore concentrate utilizing emulsions of polymer binders or dry polymer binders.

394/Mas/86. Ruhrgas Aktiengesellschaft. Furnace for the heat treatment of work pieces.

395/Mas/86. Obedineni Savodi Za Zapametyavashiti Ustroystva. Apparatus for autonomus control of printing devices.

396/Mas/86. Potters Industries Inc. Method and apparatus for making spherical particles and the particles produced thereby.

22nd May, 1986

397/Mas/86. V. V. Jayaraman. Manufacture of nitrobenzene from benzene using nitric acid alone.

398/Mas/86. AE PLC. Bearing materials. (May 28, 1985; Great Britain).

26th May, 1986

399/Mas/86. E. G. K. Rao. Improvements relating to computational and teaching aids.

400/Mas/86. Lucas-TVS Limited. A method of manufacture of a moulded insulation electric coil and an electric coil manufactured thereby.

401/Mas/86. Lucas-TVS Limited. A ballasted ignition coil for use in automobiles.

403/Mas/86. Stearns Catalytic World Corporation. Control of sulfates in membrane cell chlor-alkali process.

404/Mas/86. Raychem Corporation. Sheet Heaters.

405/Mas/86. Sony Corporation. An apparatus for loading a record medium cassette.

406/Mas/86. Mobil Corporation. Method for reactivation of zeolite dewaxing catalysts.

27th May, 1986

407/Mas/86. A. H. Robins Company, Incorporated. N-substituted-arylalkyl and arylalkylene amino-terocyclics AS cardiovascular antihistaminic and antisecretory agents.

408/Mas/86. Mitsuboshi Belting Ltd. Power transmission tensile cord and belt manufacture.

409/Mas/86. Mitsuboshi Belting Ltd. Power transmission belt.

410/Mas/86. International Standard Electric Corporation. Optical Waveguides.

411/Mas/86. Raychem Corporation. Cable blocking and splice protection. (August 1, 1985; Great Britain).

28th May, 1986

412/Mas/86. Lucas Industries Public Limited Company. Vehicle Braking System. (May 30, 1985; United Kingdom).

413/Mas/86. Lucas Industries Public Limited Company. Vehicle Braking System. (May 30, 1985; United Kingdom).

414/Mas/86. K. N. Gopalan. An inline—2 stroke 2 in 4 I.C. engine.

415/Mas/86. Union Carbide Corporation. A method of preparing a prepreg. (Divisional to Patent Application No. 48/Mas/84).

416/Mas/86. Union Carbide Corporation. A method of preparing a composite structure. (Divisional to Patent Application No. 48/Mas/84).

417/Mas/86. DSM Resins B.V. Photopolymerizable composition and a photo-initiator system.

418/Mas/86. Stauffer Chemical Company. Solid, phytoactive compositions, methods of use and methods of preparation.

419/Mas/86. The Dow Chemical Company. Novel fluoropolymer solutions.

29th May, 1986

420/Mas/86. Elkem a/s. Apparatus for removing a casting from an elongate body.

421/Mas/86. Enichem Elastomeri S.p.A. Isoprene polymerisation process.

422/Mas/86. International Business Machines Corporation. Printer including means for advancing additional ink ribbon as required.

423/Mas/86. Ebara Corporation. Hollow fiber filter device.

424/Mas/86. Societe des Produits Nestle S.A. Agglomeration method and apparatus.

30th May, 1986

425/Mas/86. F. L. Smidth & Co. Stationary clinker cooler. (June 28, 1985; Great Britain).

426/Mas/86. British-American Tobacco Company Ltd. Improvements relating to the treatment of tobacco (June 15, 1985; United Kingdom).

428/Mas/86. Hitachi Zosen Corporation. Milling apparatus.

429/Mas/86. Mitsui Toatsu Chemicals, Inc. Glass-fiber reinforced polypropylene resin composition.

#### COMPLETE SPECIFICATION ACCEPTED

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CLASS : 32-F<sub>2</sub> (b); 55-E<sub>2</sub>, 4; 60-X<sub>2</sub> d

157856

Int. C. : C 07 d 57/38.

PROCESS FOR THE PREPARATION OF ANTIVIRAL SUBSTITUTED 9-(1 OR 3-MONOACYLOXY OR 1, 3-DIACYLOXY-2-PROPOXYMETHYL) PURINES.

Applicant : SYNTEX (U.S.A.) INC. OF 3401 HILLVIEW AVENUE, PALO ALTO, CALIFORNIA 94304, U.S.A.

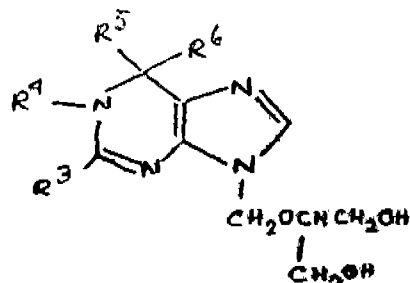
Inventors : 1. JULIEN PIERRE HENRI VERHEYDEN, 2. JOHN CHARLES MARTIN.

Application No. 113/Cal/83 filed January 31, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 2 Claims

A process for preparing a compound of the formula I shown in the accompanying drawings,



Formula I

and the acid addition salts, preferably the pharmaceutically acceptable acid addition salt thereof, wherein

R<sup>1</sup> is hydrogen or -C(O)R<sup>7</sup> wherein R<sup>7</sup> is hydrogen, alkyl of one to nineteen carbon atoms, hydroxyalkyl of one to eight carbon atoms, alkoxyalkyl of two to nine carbon atoms, alkenyl of two to nineteen carbon atoms, phenyl, 1-adamantyl, 2-carboxyethyl or carboxymethyl and the pharmaceutically acceptable alkali metal salts thereof;

R<sup>2</sup> is -C(O)R<sup>7</sup> wherein R<sup>7</sup> is as defined above;

R<sup>3</sup> is hydrogen, halo, thio, lower alkylthio of one to six carbon atoms, azido, NR<sup>9</sup>R<sup>10</sup> wherein R<sup>9</sup> and R<sup>10</sup> are independently hydrogen or lower alkyl of one to six carbon atoms or -NHC(O)R<sup>8</sup> wherein R<sup>8</sup> is hydrogen, alkyl of one to nineteen carbon atoms or 1-adamantyl; and

(A) R<sup>4</sup> is hydrogen, halo, lower alkoxy of one to six carbon atoms, azido, thio, lower alkylthio of one to six carbon atoms -NR<sup>9</sup>R<sup>10</sup> wherein R<sup>9</sup> and R<sup>10</sup> are defined above or -NHC(O)R<sup>8</sup> wherein R<sup>8</sup> is as defined above and R<sup>4</sup> together with R<sup>5</sup> is a single bond; or

(B) R<sup>5</sup> together with R<sup>6</sup> signify a keto oxygen and R<sup>4</sup> is hydrogen which compares :

(a) reacting a compound of the formula shown in Fig. 7 of the drawings,

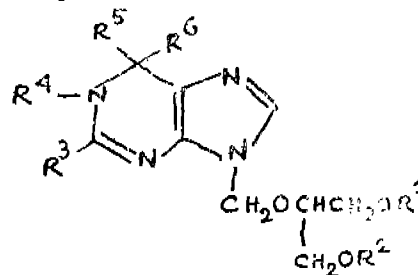


Fig. 7

with a complex of dicyclohexyl-carbodiimide and a carboxylic acid to form compounds of formula I shown in the drawings wherein R<sup>1</sup> and R<sup>2</sup> are -C(O)R<sup>7</sup>; optionally followed by

(b) converting compound of formula I shown in the drawings to its acid addition salt, or

(c) converting compound of formula I shown in the drawings to its alkali metal salt, or

(d) converting the acid addition salt to the corresponding compound of formula I shown in the drawings, or

(e) converting the alkali metal salt to the corresponding compound of formula I shown in the drawings.

Compl. Specn. 54 pages.

Drgs. 4 sheets.

CLASS : 42-C.

157857

Int. Cl. : A 24 f 13/06.

IMPROVEMENTS RELATING TO TOBACCO SMOKE FILTERS.

Applicant : BROWN & WILLIAMSON TOBACCO CORPORATION, OF 1600 WEST HILL STREET, LOUISVILLE, KENTUCKY 40232, UNITED STATES OF AMERICA.

Inventor : 1 JOHN ANTHONY LUKE.

Application No. 125/Cal/83 filed February 2, 1983.

Convention dated 2nd February, 1982 (82 02941) United Kingdom.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### Claims 14

A tobacco smoke filter including a rod-like plug of filtration material; wherein said plug has at least one airflow groove at its periphery, said groove increasing in depth from an inlet end to an outlet end of the groove; wherein the groove, when viewed as a development view of the plug, has a component of its length which is transverse to the axis of said plug; and wherein said groove has at its outlet end an outlet face which is pervious to airflow.

Compl. Specn. 10 pages.

Drg. 1 sheet.

CLASS : 42-C.

157858

Int. Cl. A 24 f 13/06.

IMPROVEMENTS RELATING TO TOBACCO SMOKE FILTERS.

Applicant : BROWN & WILLIAMSON TOBACCO CORPORATION, OF 1600 WEST HILL STREET, LOUISVILLE, KENTUCKY 40232, UNITED STATES OF AMERICA.

Inventor : 1. JOHN ANTHONY LUKE.

Application No. 126/Cal/83 February 2, 1983.

Convention dated 2nd February, 1982 (82 002945) United Kingdom.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 15 Claims

A tobacco smoke filter including a rod-like plug of filtration material and having at least one airflow duct at the periphery of said plug, wherein said at least one airflow duct has an outlet opening at the mouth end of said plug and an inlet opening spaced from the mouth end, and wherein said at least one airflow duct has a region in which the depth progressively decreases along the airflow duct in a direction towards the mouth end of the plug.

Compl. Specn. 11 pages. Drg. 1 sheet.

CLASS : 33-A & D.

157859

Int. Cl. B 22 d 45/00.

APPARATUS FOR THE SHAPING OF MATERIALS SUCH AS METALS, AS WELL AS CASTABLE NON-METALLIC MATERIALS, SUCH AS GLASS.

Applicant : BRITISH STEEL CORPORATION, OF 9 ALBERT EMBANKMENT, LONDON, SE1 7 SN., ENGLAND.

Inventors : 1. GENE DONALD SPENCELEY, 2. STEVEN HENDERSON.

Application No. 298/Cal/83 filed March 10, 1983.

Convention dated 11th March, 1982 (82 07155) United Kingdom.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 12 Claims

Apparatus for the shaping of materials, such as metals, as well as castable non-metallic materials, such as glass, glass-ceramics, metal oxides or thermoplastics comprising a molten material containing vessel and/or delivery system and a material shaping station, characterized by a hollow carrier for transferring liquid material from the vessel or delivery system to the shaping station under turbulent flow conditions with heat being given up by the material to or through the hollow carrier whilst maintaining the fluidity of the emergent material by maintenance of high shear within the fluid.

Compl. Specn. 15 pages. Drgs. 3 sheets.

CLASS : 69-I.

157860

Int. Cl. H 01 h 1/00.

A CONTACT ARRANGEMENT.

Applicant : SIEMENS AKTIENGESellschaft, OF BERLIN AND MUNICH, WEST GERMANY.

Inventors : 1. HEINZ HOMBERG, 2. KURT FRANKE.

Application No. 470/Cal/83 filed April 21, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

#### 10 Claims

A contact arrangement suitable for an electrical switch, comprising a roller contact and another contact, the two contacts being cooperable such that in a closing operation relative movement takes place between them in a predetermined direction until the two contacts touch, the roller contact then moving along the other contact until relative movement comes to an end with the two contacts in a fully closed condition, the contact arrangement further comprising spring means which urge the roller contact against the other contact after the contacts have touched one another and a guideway along which the roller contact is guided to move by force exerted on it by the other contact after the contacts have touched one another, the guideway being inclined relative to a plane extending at 90° to said predetermined direction.

Compl. Specn. 7 pages. Drg. 2 sheets.

CLASS : 127B, 134A, 107G & 174G.

157861

Int. Class : F16f 15/00 & F02b 75/06.

"RECIPROCATING PISTON-TYPE INTERNAL COMBUSTION ENGINE WITH IMPROVED BALANCING SYSTEM".

Applicant : BRIGGS & STRATTON CORPORATION, A CORPORATION OF DELAWARE, UNITED STATES OF AMERICA, OF P.O. BOX 702, MILWAUKEE, WISCONSIN 53201, UNITED STATES OF AMERICA.

Inventor : NORBERT MICHAEL VOGEL, RONALD RAYMOND GANLKE & JOSEPH ROBERT HARKNESS.

## 9 Claims

Application for Patent No. 216/DEL/1982 filed on 16th March, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 4 Claims

An engine of the reciprocating piston type in which a crankshaft that is journaled in opposite end walls of an engine block has crankpin means by which it is linked with the piston means of the engine and conventional counterweight means fixed to the crankshaft diametrically opposite its crankpin means, said engine being characterized in that (A) first and second auxiliary shafts extend through the engine block and are rotatably journaled in the opposite end walls thereof, each of said auxiliary shafts including an end portion extending exteriorly of the engine block from said opposite end walls thereof, said auxiliary shafts defining rotational axes that are fixed with respect to and parallel with the crankshaft axis on diametrically opposite sides thereof in a common plane with the crankshaft axis as equal distances therefrom which is greater than the radius of the circumferential path of the conventional counterweight means; (B) first and second auxiliary counterweights of identical mass in addition to said conventional counterweight means mounted eccentrically on respective end portions of said auxiliary shafts exteriorly of the engine block adjacent said end walls; and (C) means for imparting rotation to said auxiliary counterweights in the direction opposite to that of the crankshaft by at the same speed, comprising: (1) a toothed pulley fixed along its central rotational axis on each of said auxiliary shafts exteriorly of said engine block adjacent to and coaxially with the respective first and second auxiliary counterweights; (2) a toothed pulley coaxially fixed with respect to the crankshaft exteriorly of said engine block, said toothed pulleys being of the same diameter, and (3) an endless flexible motion transmitting element having opposite faces, each of which is drivingly engageable with the circumference of a toothed pulley, said flexible motion transmitting element being trained over all of said toothed pulleys with one face thereof engaging the toothed circumference of the pulley that is fixed with respect to the crankshaft and the opposite face thereof engaging the toothed circumference of the other of said pulleys, so that when the engine is running, said auxiliary counterweights rotate at crankshaft speed but in the opposite direction from that of the crankshaft and said endless flexible motion transmitting element holding said auxiliary counterweights in such angularly relationship to the conventional counterweight means that the inertial forces produced by rotation of the conventional counterweight means and of said auxiliary counterweights combine to balance the inertial force resulting from reciprocation of the piston means when the latter approaches either terminus of its stroke, whereas at substantially the point the piston means passes in either direction through the midpoint in its stroke, the inertial forces resulting from rotation of said auxiliary counterweights oppose the inertial forces resulting from rotation of said conventional counterweight means, and the summation of the moments produced by the conventional counterweight means and the additional counterweight means is zero.

Complete specification 27 pages. Drgs. 3 sheets.

CLASS : 208.

157862

Int. Class : C09d 11/18.

"INK FOR A BALL POINT WRITING INSTRUMENT".

Applicant : SCRIPTO, INC., A GEORGIA CORPORATION, U.S.A., OF 7012 BESTFRIEND ROAD, DORAVILLE, GEORGIA 30340, UNITED STATES OF AMERICA.

Inventor : FRANK ANDREW MULLER.

Application for Patent No. 221/DEL/1982 filed on 17th March, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch New Delhi-110005.

An ink, for a ball point writing instrument, capable of depositing on an absorbent, paper-like writing surface having minute voids, an initially erasable but eventually permanent trace, the ink comprising the following components :—

- (a) an elastomer, being natural rubber or a synthetic rubber which essentially duplicates the chemical structure of natural rubber, or a mixture of natural rubber and such synthetic rubber,
- (b) pigment,
- (c) a solvent system comprising :—
  - (c1) a volatile component having a boiling point less than 180°C and present in an amount of at least 8% by weight of the ink, and
  - (c2) a non-volatile component having a boiling point between 180°C and 300°C and present in an amount of at least 21% by weight of the ink.

Compl. specn. 27 pages.

CLASS : 80 K.

157863

Int. Class : B 01d 37/00.

"TRAVELLING BELT FILTER FOR EXTRACTION OF SOLUBLE COMPONENTS FROM A SLURRY".

Applicant : ROBERT LINN SOMERVILLE, OF 256 OLD ANWELL ROAD, ROUTE 1, NESHANIC, NEW JERSEY 08853, UNITED STATES OF AMERICA, A U.S. CITIZEN.

Inventor : ROBERT LINN SOMERVILLE.

Application for Patent No. 225/DEL/1982 filed on 18th March, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 18 Claims

A travelling belt filter comprising an elongated filtering trough having a base and side walls a roller adjoining each end of said trough, an endless belt carried by said rollers with the upper portion of said belt overlying the base of the trough and with the edges of the belt in spaced relationship to the walls thereof, finer cloth overlying and traveling with said belt and vacuum channels in the base of said belt and the adjoining side walls of said trough which form vacuum ports.

Complete specification 24 pages. Drawings 4 sheets.

CLASS : 6B.

157864

Int. Class : B01f 3/04.

"PROCESS FOR THE PREPARATION OF A GASEOUS MIXTURE OF A GAS AND A VAPORIZED LIQUID".

Applicant : UNION CARBIDE CORPORATION, MANUFACTURERS, A CORPORATION ORGANISED UNDER THE LAWS OF THE STATE OF NEW YORK, UNITED STATES OF AMERICA LOCATED AT OLD RIDGEBURY ROAD, DANBURY, STATE OF CONNECTICUT, 06817, UNITED STATES OF AMERICA.

Inventor : GREGORIO TARANCON.

Application for Patent No. 229/Del/1982 filed on 19th March, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 9 Claims

A process for the preparation of a gaseous mixture of a gas and a vaporized liquid having a constant composition regardless of change in the rate of flow of said gas which comprises :

- (a) preparing a mixture of predetermined proportions of a gas such as herein described and a vaporizable liquid such as herein described :

- (b) introducing said mixture at a pressure in the range of from 0 psig to psig into the tube side of a tube and shell heat exchanger at a flow rate sufficient to cause turbulence ;
- (c) heating said mixture to a temperature in the range of from 20°C to 120°C by introducing a heating fluid into the shell side of said heat exchanger whereby at least part of said vaporizable liquid vaporizes to provide a liquid phase and a vapor phase ; and
- (d) withdrawing said gaseous mixture of gas and vaporized liquid for use and recycling said liquid phase to the point of introduction in step (a).

Complete specification 19 pages, Drg. 1 sheet.

CLASS : 32 E.

157865

Int. Class : C08f 45/28.

"PROCESS FOR THE PREPARATION OF PLASTICIZER MATERIAL FOR USE IN PLASTICS INDUSTRY".

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAJ MARG, NEW DELHI-110001 INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : GIRIJA SHANKAR CHOUDHARY, (HIMMAT SINGH & INDER BUSHAN GULATI).

Application for Patent No. 253/Del/82 filed on 25th March, 1982.

Complete specification left on 25th June, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 7 Claims

A process for the preparation of plasticiser material for use in plastics industry comprising reacting liquid hydrocarbons feedstock, obtained as byproducts from petroleum refiners, coal tar, coal or biomass or like sources, with a mineral acid in an inert atmosphere in the presence of air, treating the reaction mixture with water or a polar solvent, separating the sludge formed and treating resultant product with a decoloriser.

Provisional specification 5 pages.

Complete specification 8 pages.

CLASS : 32F<sub>3</sub>(c) & 17A.

157866

Int. Class : C07c 31/08.

"A PROCESS FOR THE CONVERSION OF STARCH BASED AGRICULTURAL PRODUCTS INTO ALCOHOL".

Applicant : PUNJAB TRACTORS LTD., OF PHASE IV, SAHIBZADA AJIT SINGH NAGAR, DISTT. ROPAR-160051, INDIA, AN INDIAN COMPANY.

Inventor : DHARAMVIR VADEHRA.

Application for Patent No. 257/Del/1982 filed on 26th March, 1982.

Complete specification left on 18th May, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 4 Claims

A process for the conversion of starch based agricultural products into alcohol which consists in converting said starch based agricultural products into maltose, by adding a swelling agent, such as water, to the produce and then heating the same in the presence of an enzyme to a temperature of 80 to 95°C, subjecting the maltose to a step of fermentation to obtain alcohol and finally subjecting the alcohol to the step of concentration.

Provisional specification 6 pages.

Complete specification 8 pages.

CLASS : 90 I & 64 B.

157867

Int. Class : C03c 27/00, B65h 69/00, B21f 15/06, H01r 5/00 & 43/00.

CONNECTOR FOR OPTICAL FIBRES AND A METHOD OF PRODUCING IT.

Applicant : RADIAL INDUSTRIES OF 101, RUE PHILIBERT HOFFMANN, ZONE INDUSTRIELLE QUEST, 93116 ROSNY-SOUS-BOIS, FRANCE, A FRENCH COMPANY.

Inventor : JEAN BERNARD DESPOUYS.

Application for Patent No. 283/Del/1982 filed on 8th April, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

#### 14 Claims

A connector for optical fibres comprising : first and second male ferrules having a passage into which an optical fibre is adapted to be introduced and fixed such that an end of the fibre coincides with a tubular axial protuberance formed on and of said ferrule, said ferrules further including an annular recess set back from and surrounding said axial protuberance, said recess defining a bearing surface on said ferrules ; and

a female reconfigurable connector having a longitudinal bore for supporting said first and second male ferrules face to face, said female connector including in the central portion of the longitudinal bore an abutment body having an axial orifice passing therethrough for receiving the tubular axial protuberances of the first and second male ferrules, said abutment body further including bearing surfaces for contact with opposing bearing surfaces of the first and second male ferrules ;

wherein the opposing bearing surface of the abutment body and the first and second male ferrules are arranged in such a way that at the time of any relative movement of opposing bearing surfaces, the end of the fibre fixed in the axial protuberance is maintained at a constant predetermined distance from the centre of said abutment body.

Complete specification 25 pages, Drags. 5 sheets

CLASS : 107G

157868

Int. Cl. : F 02 m 39/00.

A FUEL INJECTION PUMP FOR AN INTERNAL COMBUSTION ENGINE.

Applicant : SOCIETE D'ETUDES DE MACHINES THERMIQUES S.E.M.T., A FRENCH BODY CORPORA-TE OF 2, QUAI DE SEINE, 93202 SAINT DENIS, FRANCE.

Inventor : DIRK BASTENHOF.

Application for Patent No. 290/Del/1982 filed on 12th April, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

#### 8 Claims

A fuel injection pump for an internal combustion engine, comprising a fuel admission chamber adapted to be filled with fuel through admission ports, a piston including a head with a helical edge, and displaceable in rectilinear to-and-fro movement between a lower dead centre position and an upper dead centre position within said admission chamber and a device including a valve for closing and opening a bypass passage connecting the admission chamber to a space provided by a casing surrounding said admission chamber and communicating with the source of admission chamber filling fuel, and a system for the control of the valve, which comprises a control device for closing the valve depending on the angular position of a rotary member of the engine, such as the crankshaft.

Compl. specn. 10 pages.

Drg. 1 sheet.

CLASS : 102 D

157869

Int. Cl. : F 16 h 53/00.

## PRESSURIZED FLUID MECHANISM.

Applicant : POCLAIM HYDRAULICS, OF BOITE POSTALE NO. 12, 60410 VERBERIE, FRANCE, A FRENCH COMPANY.

Inventors : LOUIS BERNARD BIGO AND PATRICK EDMOND RAMOUSSE.

Application for Patent No. 293/Del/82 filed on 13th April, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 8 Claims

Pressurized fluid mechanism such as a hydraulic engine or pump, comprising :

- a body supporting at least a cam,
- a cylinder-block mounted for rotating about an axis, with respect to the said body,
- a plurality of cylinders provided radially with respect to the said axis of rotation of the cylinder-block,
- pistons mounted for sliding inside said cylinders, one piston per cylinder,
- cylindrical rollers through which the pistons rest on the cam or cams, having axis parallel to the rotation axis on the cylinder-block, each provided with part of a transverse bore provided in each piston, and,
- means for holding each roller in axial position inside its bore, which means are constituted by abutments mounted on the cylinder-block, wherein each roller is provided with two co-axial projecting members placed on each side of the roller, whereas the said abutments present slots in radial directions, coinciding with the radial planes (R) containing the said projecting members, so as to allow the radial spring-back clearance of these projecting members concomitantly to the sliding of the piston.

Compl. specn. 16 pages.

Drg. 9 sheets.

CLASS : 128 G

157870

Int. Cl. : A 61 j 17/00.

## A TEETHER FOR USE BY AN INFANT.

Applicant : CHILDCARE, A PARTNERSHIP FIRM OF F-6, KAILASH COLONY, NEW DELHI-110026, INDIA, AN INDIAN FIRM, WHOSE PARTNERS ARE : SHIVDEV SINGH GREWAL, HEMANT KUMAR GUPTA, INDER KAUH GREWAL AND KRISHNA PRASAD TANDON, ALL INDIAN NATIONALS.

Inventor : HEMANT KUMAR GUPTA.

Application for Patent No. 298/Del/1982 filed on 14th April, 1982.

Complete specification left on 11th July, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office Branch, New Delhi-110005.

## 4 Claims

A teether for use by an infant comprising a resilient pad, at least one end of said pad being stiffer than the remainder of said pad, said remainder of the pad having spaced ribs extending from the stiffened end of the pad, the thickness of the pad being smaller than the thickness of said ribs.

Provisional specn. 4 pages.

Compl. specn. 5 pages.

Drg. 1 sheet.

CLASS : 39-E + 123

157871

Int. Cl. : C 05 b 13/00.

## AN IMPROVED PROCESS FOR OBTAINING NITRO-PHOSPHATE FERTILIZER BY THE NITRIC ACID ROCK PHOSPHATE ROUTE.

Applicant : PROJECTS & DEVELOPMENT INDIA LTD. C.I.F.T. BUILDINGS, P.O. SINDRI, PIN 828122, DIST. DHANBAD, BIHAR, INDIA.

Inventors : 1. DAMODAR GIRIDHAR RAO, 2. SATYENDRA VARMA, 3. ASHUTOSH MUKHERJEE, 4. RAM UDAR SINGH, 5. ANWAR AHMAD, 6. OM PRAKASH MITAL, 7. BISWANATH GUPTA, 8. BAI-SAKH GUPTA, 9. AJIT KUMAR DAS.

Application No. 876/Cal/82 filed July 28, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 8 Claims

An improved process for manufacturing nitro phosphate fertilizer wherein rock phosphate is digested with nitric acid in presence of phosphoric acid, the acidulated solution obtained is reacted with ammonium sulphate and the gypsum by product freed reaction mass further subjected to ammonialysis, characterized in that said digestion with nitric acid is carried using nitric acid of 53% to 60% strength wt/wt at temperatures of 50 to 90°C in the absence of phosphoric acid, the acidulated slurry thus obtained is then filtered to remove undigested material, whereafter the clear filtered solution is then reacted with 30 to 45% strength ammonium sulphate solution around 50 to 70°C, followed by removing the precipitated gypsum from the obtained slurry and heating and concentrating the product liquor at temperature of 70 to 110°C and then reacting concentrated liquor with additional rock phosphate in amounts of 35 to 50% based on the original amount of rock phosphate, whereafter the product thus obtained is subjected, in presence of an inorganic additive such as magnesite, to usual granulation and drying.

Compl. specn. 11 pages.

Drg Nil.

CLASS : 39-I

157872

Int. Cl. : C 01 f 5/38.

## PROCESS FOR THE PREPARATION OF MAGNESIUM NITRATE HEXAHYDRATE.

Applicant : UNIF VAN KUNSTMESTFABRIEKEN B.V., OF MALIBBAAN 81, UTRECHT, THE NETHERLANDS.

Inventors : 1. MICHAEL HENDRIK WILLEMS, 2. WINFRIED HOHANNES WOUTERUS VERMIS.

Application No. 1080/Cal/82 filed September 17, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 7 Claims

Process for the preparation of magnesium nitrate hexahydrate by converting magnesium oxide with nitric acid in the presence of water, this process being characterized in that :

- (a) magnesium oxide is suspended in melted magnesium nitrate hexahydrate having a temperature in excess of 90°C;
- (b) a 53-58 wt% nitric acid solution is added to the suspension obtained, keeping the temperature of mixture at between 90 and 120°C, whilst stirring resulting in the formation of more magnesium nitrate hexahydrate;



- (c) the liquid reaction mixture is filtered;
- (d) of the liquid magnesium nitrate hexahydrate obtained as clear filtrate a part, corresponding to the amount of magnesium oxide introduced, is discharged as product;
- (e) the remaining part is utilized as liquid medium for the conversion of magnesium oxide with nitric acid.

Compl. specn. 10 pages.

Drg. Nil.

CLASS : 39-E

157873

Int. Cl. : C01f 11/00.

A REVERSIBLE LIQUID/SOLID PHASE CHANGE COMPOSITION OF CALCIUM CHLORIDE HEXAHYDRATE WITH A POTASSIUM SALT.

Applicant : THE DOW CHEMICAL COMPANY, OF 2030 DOW CENTER, ABBOTT ROAD, MIDLAND, MICHIGAN 48640, U.S.A.

Inventors : 1. GEORGE ASHEL LANE. 2. HAROLD EVERETT ROSSOW.

Application No. 1202/Cal/82 filed October 14, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A reversible liquid/solid phase change composition comprising an admixture of hydrated  $\text{CaCl}_2$  and a potassium salt characterized in that the anion of the potassium salt forms a substantially less soluble salt with calcium, wherein the potassium salt is added to the hydrated  $\text{CaCl}_2$  to modify the semi-congruent melting behavior of  $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$  so that the mixture approaches the congruent melting behavior of a congruently melting mixture and to reduce, during retrieval of the stored heat by crystallization of the mixture, the formation of crystalline  $\text{CaCl}_2$  hydrate phases other than  $\text{CaCl}_2 \cdot 6\text{H}_2\text{O}$ .

Compl. specn. 19 pages.

Drg. Nil.

CLASS : 108-C

157874

Int. Cl. : C23f 11/00.

METHOD OF MANUFACTURING A CORROSION RESISTANT NON-ALLOY STEEL COMPONENT.

Applicant : LUCAS INDUSTRIES PUBLIC LIMITED COMPANY OF GREAT KING STREET, BIRMINGHAM 19, ENGLAND.

Inventors : 1. CYRIL DAWES. 2. JOHN DAVID SMITH.

Application No. 1211/Cal/82 filed October 15, 1982.

Conventions dated 15th October, 1981 (81 34133) U.K., 18th December, 1981 (81 38318) U.K., 26th February, 1982 (82 05999) U.K., 15th July, 1982 (82 20495) U.K.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 11 Claims

A method of manufacturing a corrosion resistant non-alloy steel component comprising the steps of heat treating a non-alloy steel component in a nitriding gaseous atmosphere to produce an epsilon iron nitride surface layer thereon, and subsequently heat treating the component in an oxidising atmosphere to produce an oxide-rich surface layer consisting mainly of  $\text{Fe}_2\text{O}_3$ , said layer having a thickness which does not exceed 1 micrometre, and then quenching the component into an oil/water emulsion with the component at a temperature such that nitrogen is retained in solid solution in the ferritic matrix of the steel microstructure.

Compl. specn. 31 pages.

Drg. 2 sheets.

2—147GI/86

CLASS : 98-I; 205-E

157875

Int. Cl. : H011 15/02.

A METHOD OF FABRICATING IMPROVED PHOTOVOLTAIC DEVICES.

Applicant : ENERGY CONVERSION DEVICES, INC. 1675 WEST MAPLE ROAD, TROY, MICHIGAN 48084, U.S.A.

Inventor : 1. PRE NATH.

Application No. 140/Cal/83 filed February 7, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 20 Claims

A method of fabricating improved photo-voltaic devices, each photo-voltaic device including a common electrically conductive substrate layer, a semiconductor body deposited upon the substrate layer, and a transparent, electrically conductive layer deposited over the semiconductor body; the method comprising the steps of:

dividing the semiconductor body into a plurality of portions, each portion being substantially electrically isolated from other portions;

testing the electrical output of each isolated portion of the semiconductor body;

connecting only those isolated portions providing satisfactory electrical output to an electrically conductive strip;

the conductive strip providing an electrical contact associated with the semiconductor body; and

providing an electrical contact on the substrate layer; whereby the overall efficiency of the photovoltaic device is improved by electrically connecting only those portions of the semiconductor body providing satisfactory electrical output.

Compl. specn. 39 pages.

Drg. 2 sheets.

CLASS : 167-C

157876

Int. Cl. : B03c 1/02.

APPARATUS FOR SEPARATING FERROMAGNETIC MATERIALS FROM FLUID MEDIA.

Applicant : UKRAINSKY INSTITUT INZHENEROV VODNOGO KHOZYAISTVA, OF ROVNOO, ULITSA LENINSKAYA, 11, USSR.

Inventors : 1. ALEXANDR VASILIEVICH SANDULYAK. 2. VYACHESLAV IVANOVICH GARASCHENKO. 3. VLADIMIR VASILIEVICH SANDULYAK. 4. OLEG JURIEVICH KORKHOV.

Application No. 571/Cal/83 filed May 6, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 10 Claims

An apparatus for separating ferromagnetic materials from fluid media, which incorporates stationary chamber; filtering packing in a ferromagnetic material contained in each of the chambers; each pair of said chambers fitted with an individual means of magnetization the magnetic circuit whereof comprises two opposite sections located on either side of a line through the centres of the chambers, each of these sections being made up of a magnet and pole pieces arranged next to the chambers at the diametrically opposite ends of a line at right angles to said line passing through the centres of the pairs of chambers so that the two sections form a closed magnetic circuit in conjunction with the ferromagnetic filtering packings; pipes for feeding and discharging a fluid medium.

Compl. specn. 19 pages.

Drg. 4 sheets.

CLASS 40-F

157877

4 Claims

Int. Cl. : B 01 i 1/00

AN IMPROVED PROCESS FOR REMOVING METALLIC CONTAMINANT FROM LIQUID WASTE STREAM.

Applicant : STAUFFER CHEMICAL COMPANY OF WESTPORT, CONNECTICUT 06880, UNITED STATES OF AMERICA.

Inventors : 1. RAMSEY GORDON CAMPBELL, 2. EMILIO SANCHEZ VELEZ, 3. WILLIAM MILLARD BURKS JR, 4. ELLIOTT PORTER DOANE.

Application No. 606/Cal/83 filed May 13, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 18 Claims

An improved process for removing a metallic contaminant of the type herein described from a liquid waste stream containing one or more chlorinated hydrocarbons such as herein described the improvement comprising contacting waste stream with at least 1 volume, per volume of organic material (being the material which is neither water nor metallic contaminants) in the waste stream, of a dilute aqueous solution of a mineral acid such as herein described containing from 0.1 to 10 per cent by weight of acid, and separating as herein described the resulting aqueous and organic phases.

Compl. specn. 22 pages.

Drg. 4 sheets.

CLASS : 187-F

157878

Int. Cl. : H 04 m 9/00.

ADDITIONAL LINE COUPLING CIRCUIT TO AN INTERCOM TELEPHONE SET.

Applicant : COMPAGNIE DE CONSTRUCTION TELEPHONIQUE, 251 RUE DE VAUGIRARD, 75740 PARIS CEDEX 15, FRANCE.

Inventors : 1. BERNARD MARIE ANDRE MEUNIER, 2. ERIC JEAN GRADIER.

Application No. 859/Cal/83 filed July 11, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 4 Claims

Additional line coupling circuit to an intercom telephone set, characterized in that it comprises, inserted between the additional line (LC) and the intercom telephone set (PI), a d.c. line uncoupling circuit (CC), as well as means (OC1) coupled to one of the wires (L 3) of the line for transmitting signals on the line (LC), and means (OC2) connected to one or the other (L4) of the line wires for receiving the signals transmitted on the line.

Compl. specn. 6 pages

Drg. 1 sheet.

CLASS : 32-E; 40-F

157879

Int. Cl. : C 08 f 1/96.

METHOD FOR THE PURIFICATION OF PROPYLENE POLYMERS.

Applicant : MITSUI TOATSU CHEMICALS, INCORPORATED, NO. 2-5, KASUMIGASEKI 3-CHOME, CHIYODA-KU, TOKYO, JAPAN.

Inventors : 1. TATUO OOKA, 2. NOBUTAKA UCHIKAWA, 3. YOSHIYUKI FUNAKOSHI, 4. EIICHI TOYOTA, 5. NOBUYOSHI IMURA.

Application No. 932/Cal/83 filed July 28, 1983.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

A method for the purification of propylene polymers which comprises bringing a propylene polymer containing volatile components into contact with a gas consisting mainly of propylene at a temperature lower than the melting point of the polymer, whereby the volatile components are removed from the propylene polymer.

Compl. specn. 17 pages.

Drg. 1 sheet.

CLASS : 136-D

157880

Int. Cl. : B 29 h 9/10.

BONDED COMPOSITES AND A METHOD OF MAKING THE SAME.

Applicant : DUNLOP LIMITED, OF DUNLOP HOUSE, RYDER STREET, ST. JAMES'S LONDON S.W.1, ENGLAND.

Inventor : 1. JAMES FRANK YARDLEY.

Application No. 1262/Cal/83 filed October 12, 1983.

Convention dated 27th October, 1982 (30704) United Kingdom.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1972) Patent Office, Calcutta.

## 15 Claims

A method of making a bonded composite of (i) a thermoplastic elastomeric blend of vulcanized EPDM particles not more than 50 microns in size dispersed in a thermoplastic linear crystalline polyolefin continuous phase,

with (ii) a vulcanized EPDM or EPM rubber composition containing less than 50% by volume of rubber,

which comprises fusing the thermoplastic elastomeric blend and solidifying it in contact with the vulcanized rubber composition in the absence of an adhesive interlayer.

Compl. specn. 11 pages.

Drg. 2 sheets.

CLASS : 85C,

157881

Int. Class : F 27b 3/18.

"CHARGING DEVICE FOR A SHAFT FURNACE".

Applicant : PAUL WURTH S.A., OF 32, RUE D'ALSACE, LUXEMBURG, GRAND DUCHY OF LUXEMBOURG, A COMPANY ORGANIZED UNDER THE LAWS OF LUXEMBOURG.

Inventors : EDOUARD LEGILLE, PIERRE MAILLIET & EMILE LONARDI.

Application for Patent No. 176//Del/1982 filed on 3rd March, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 15 Claims

A charging device for a shaft furnace comprising a distribution apparatus with a rotary or oscillating spout at least one storage enclosure having a delivery orifice situated above said spout, a dosing and closing means mounted at the delivery orifice of said enclosure and serving to regulate the rate at which furnace charging material is fed from said enclosure to said spout, the enclosure being mounted with its delivery orifice on the vertical axis of said furnace, said dosing and closing means mounted at said delivery orifice increasing or reducing the size of said orifice symmetrically about the vertical axis of said furnace.

Complete specification 26 pages.

Drawings 9 sheets.

CLASS : 47 A.

157882

Int. Class : C 10b 47/00.

METHOD FOR THE PRODUCTION OF H<sub>2</sub> AND CONTAINING GASES.

Applicant : BFRGWERKSVERBAND GMBH, OF FRANZ-FISCHER-WEG 61, 4200 ESSEN 13, WEST GERMANY, A GERMAN COMPANY.

Inventors : KARL HEINRICH VAN HECK, HELMUT JUBIAK AND HERALD JUNTGFN.

Application for Patent No. 226/DEL/1982 filed on 18th March, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 12 Claims

A method for the production of H<sub>2</sub>- and CO-containing gases (product gas) through partial gasification of finely granulated, carbon-containing particles such as coal or coke, which are partially gasified in a gasification zone operating as a fluidized bed and under indirect heating with the aid of at least one heat exchanger exchanging in the fluidized bed and flowed through by a fluid led in circulation as heat carrier, of the type in which

- (a) a residue of particles produced in the gasification zone is led into a subsequently connected combustion zone and burned in a fluidized bed therein, and a flue as produced thereby is discharged;
- (b) a heat carrier cooled in the gasification zone is led into a heat exchanger in the combustion zone;
- (c) a heat carrier heated by released combustion heat is led again into the heat exchanger of the gasification zone.

(A) characterized by partly heating the heat carrier cooled in the gasification zone in a further heat exchanger through an additional energy source, and

(B) introducing predetermined amounts of carbon-containing particles and reaction gas into the gasification zone and the combustion zone.

Complete specification 24 pages. Drawings 2 sheets.

CLASS : 191.

157883

Int. Class : B41j 5/00, 7/00 &amp; 11/00.

"A TYPEWRITER".

Applicant : REMINGTON IND. COM. DE SISTEMAS PARA ESCRITORIO S.A., OF 21.660 RIO DE JANEIRO, BRAZIL AV. BRASIL, 22.950, A BRAZILIAN COMPANY.

Inventor : NICOLO GIOLITTI.

Application for Patent No. 302/DEL/1982 filed on 14th April, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005

## 11 Claims

A typewriter having a daisy wheel type member having an axial through hole, and a drive unit which drives the said daisy wheel to rotate about its axis and which serves as a support element for the said daisy wheel and a coupling device for coupling the said daisy wheel with respect to the drive unit, said coupling device comprising : a spindle projecting axially from the said drive unit and engageable in said axial through hole of the daisy wheel :

first resilient means for creating a first thrust tending to separate said daisy wheel from said drive unit, said first resilient means engaging said daisy wheel and being carried by said drive unit on the side of said drive unit facing said daisy wheel :

second resilient means for creating a second thrust acting on said daisy wheel and having a greater magnitude and opposite direction from said first thrust, said second resilient means engaging said daisy wheel on the side opposite that facing said drive unit : and

manual control means for selectively disengaging said second resilient means from said daisy wheel, thus eliminating said second thrust and permitting said first thrust to disengage said daisy wheel from said spindle.

Complete specification 14 pages. Drawings 3 sheets.

CLASS : 98 I

157884

Int. Class : F 24j 3/02.

"SOLAR COLLECTOR FOR COLLECTING AND STORING OF SOLAR ENERGY".

Applicant : MR. VIJAY KAUL, OF G-17, MAHARANI BAGH, NEW DELHI-110065, INDIA, AN INDIAN NATIONAL

Inventor : VIJAY KAUL.

Application for Patent No. 308/DEL/08 filed on 16th April, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 12 Claims

A solar collector for collecting and storing solar energy having a chamber with an inlet for introducing therein a fluid and an outlet for discharging the fluid heated in the chamber by solar radiation, the chamber being formed by at least two sheets of one or more plastics materials spaced from each other, one of the said sheets having thereon a coating of black paint.

Complete specification 9 pages. Drawing 1 sheet.

CLASS : 119 Fc.

157885

Int. Class : D 03d 49/58.

"A SHUTTLE CONTROL DEVICE FOR USE WITH SHUTTLE LOOMS".

Applicant : SAURABH NATVERLAL KINARIWALA, OF I-10, LAJPAT NAGAR, III, NEW DELHI-110024, INDIA, AN INDIAN NATIONAL.

Inventor SAURABH NATVERLAL KINARIWALA.

Application for Patent No. 365/DEL/1982 filed on 17th May, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

A shuttle control device for shuttle looms comprising an air chamber, an oil chamber, diaphragm secured between the said chambers and separating them, a cylinder near the centre of the oil chamber, a piston displaceable in the said cylinder on receiving a strike on its head from a picker stick of a loom characterised in that tubular cover member is provided around and along the length of the said piston, the ends of the tubular member bearing against the head of the piston and the body of the device and the said member being made of a resilient material.

Complete specification 10 pages. Drg. 1 sheet.

CLASS : 188

157886

Int. Class : C 23C 3/02.

**"A PROCESS FOR CHEMICAL PHOSPHATING OF FERROUS SUBSTRATES."**

Applicant : COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH, RAFI MARG, NEW DELHI-110001, INDIA, AN INDIAN REGISTERED BODY INCORPORATED UNDER THE REGISTRATION OF SOCIETIES ACT (ACT XXI OF 1860).

Inventors : KUMMATTITHIDAL SANTHANAM RAJAGOPALAN, RENGACHARI SRINIVASAN, NARAYANASWAMY KRITHIVASAN, CHAKRAVARTHI RAJAGOPAL, MUTHUVEERAN SETHUKUMARI AND MELAY ERIYAT KOCHU JANAKI.

Application for Patent No. 377/DEL/1982 filed on 19th May, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005

## 8 Claims

A process for chemical phosphating of ferrous substrates comprising dipping the substrate in a phosphating bath containing 5 to 20% of acidified sodium phosphate, 0.025 to 2.5% of a heavy metal ion salt such as herein described and 0.05 to 1.5% of an accelerator such as herein described the bath pH being adjusted at range of 3 to 4.

Complete specification 8 pages.

CLASS : 59 A.

157887

Int. Class : B 02d 29/14.

**"TELESCOPIC EXTENSION RING FOR EXISTING MANHOLES"**

Applicant : RAJ KARAN SHARDA, CIVIL ENGINEER, INDIAN, SE BLOCK 9/141, NEW MOTI NAGAR, NEW DELHI-110 005 (INDIA).

Inventor : RAJ KARAN SHARDA.

Application for Patent No. 387/DEL/1982 filed on 22nd May, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 5 Claims

A telescopic extension ring comprising of a base flange adapted to sit horizontally on to the top surface of the existing manhole cover frame, with a (MALE) Projection/projection hanging down from the base flange on the inside to engage and fit in the corresponding housings of the existing manhole cover frame, an upward tapering tall projection (in the modified version only) on the out side of base flange to help provide more contact area with the surrounding materials, a vertical stem above the base flange reinforced by inclined fins from out side along the periphery and positioned between the edge of the base flange and top of the stem, a (FEMALE) head on the inside of the top of the stem to receive and engage the existing manhole cover in its housing/housings, the vertical distance between the bottom of the base flange and top of the stem being the height through which the raising of the manhole cover is desired.

Complete specification 5 pages. Drgs. 2 sheets.

CLASS : 27 L

157888

Int. Class : E206C 5/36 and 7/18.

**"DEVICE FOR SUPPORTING A PERSON ON A LADDER."**

Applicant : SAMUEL DAVID SMITH, A BRITISH CITIZEN OF 'JAMADA', NEWTON OF PITCAIRMS, DUNNING, PERTHSHIRE, GREAT BRITAIN.

Inventor : SAMUEL DAVID SMITH.

Application for Patent No. 392/DEL/1982 filed on 24th May, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules 1972) Patent Office Branch, New Delhi-110005.

## 8 Claims

A device for supporting a person on a ladder comprising a frame adapted to extend around said ladder with sufficient clearance to move relative to said ladder at least a portion of said frame extending at an angle relative to the remaining frame portion, said angularly-extending inwardly towards said ladder between the stiles of said ladder and means on said frame at a position opposite that of said angularly-extending portion for connecting to a belt, or the like, on said person, so that movement of said person downwardly on said ladder causes said angularly-extending portion to move between said stiles and engage a rung on said ladder a rung on said ladder to prevent further downward movement.

Complete specification 7 pages Drawings 4 sheets.

CLASS : 63 H.

157889

Int. Class : H01f 7/08, 7/13.

**"IMPROVED DC MAGNETIC SYSTEM FOR DIRECT CURRENT RELAYS OR CONTACTORS"**

Applicant : BHARTIA CUTLER-HAMMER LTD., OF 1101 NEW DELHI HOUSE 27, BAKASHASTRA ROAD, NEW DELHI-110001, INDIA, AN INDIAN COMPANY.

Inventor : NARENDER KUMAR VASISHT.

Application for Patent No. 408/D/1 82 filed on 29th May, 1982.

Appropriate office for opposition proceedings (Rule 4, Patents Rules, 1982) Patent Office Branch, New Delhi-110005.

## 10 Claims

An improved magnetic system for direct current relays or contactors which comprises a U-shaped frame member of magnetic material composed of a base and a pair of oppositely disposed side walls, a core of magnetic material located centrally within said U-shaped member, means composed of non-magnetic material for spacing the end surface of said core from the upper surface of the U-shaped member in order to provide discontinuity in the magnetic path said core being secured to the base of the U-shaped member by securing means which passes through said spacing means, a coil composed of a plurality of windings of non-magnetic material mounted about said core, at least one armature of magnetic material one end of which is pivotally connected to the upper edge of one side wall of the U-shaped frame member, coupler means movably connecting the free end of said armature with the upper edge of the other side wall, said coupler means being adapted to support a moving contact carrier the combination of the U-shaped member and the core constituting on energization of the coil substantially an E-magnet whereupon the armature is attracted towards and into

contact with the central core to provide a double flux linkage having substantially no flux leakage, said coupler means descending a distance substantially corresponding to the distance moved by the armature until the moving contact carrier supported by the coupler means engages a fixed contact located at a predetermined position.

Complete specification 18 pages. Drg. 1 sheet.

CLASS : 174 E.

157890

Int. Class : F 16f 1/18.

"LEAF SPRING ASSEMBLY".

Applicant : GKN TECHNOLOGY LIMITED, A BRITISH COMPANY OF GROUP TECHNOLOGICAL CENTRE, BIRMINGHAM, NEW ROAD, WOLVERHAMPTON, WEST MIDLANDS WV4 6 BW, ENGLAND.

Inventor : RAYMOND LE GALLAIS.

Application for Patent No. 497/DEL/1982 filed on 2nd July, 1982.

Convention dated on 15th July, 1981/8121804 (U.K.).

Appropriate office for opposition proceedings (Rule 4 Patents Rules 1972) Patent Office Branch New Delhi-110005.

#### 12 Claims

An assembly of a leaf spring, comprising a leaf spring made from a fibre reinforced synthetic resin material of the kind herein described, and at least one end fitting comprising an attachment member lying within a recess extending transversely of the spring and defined by a terminal portion of the spring, and a clamping member extending around the attachment member and terminal portion of the spring adjacent said terminal portion to exert a force to hold the attachment member in said recess.

Complete specification 9 pages. Drg. 1 sheet.

#### CORRECTION OF CLERICAL ERRORS

Under section 78(1) of the Patents Act, 1970 certain clerical errors occurring in the specification in respect of Patent No. 153618 has been corrected on 2nd June 1986.

#### PATENTS SEALED

149131 154809 154885 155237 155294 155295 155297 155300  
155333 155342 155344 155345 155430 155451 155475 155492  
155555 155589 155607 155609 155610 155611 155612 155614  
155625 155631 155639 155656 155668 155670 155737 155740  
155743 156546 156663

#### REGISTRATION OF ASSIGNMENTS, LICENCES ETC. (PATENTS)

Assignment has been registered in the following case. The number of case is followed by the name of the party claiming interest.

146643 : YWHC, INC.,

#### RENEWAL FEES PAID

137351 137577 139714 141097 141786 142307 142418 143262  
143864 144177 144189 144236 144452 144459 144474 144665  
144788 145346 145466 145693 145798 146345 146411 146709  
146818 147264 147418 147515 147520 147610 147675 147722  
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148974 149127 149128 149819 149968 150119 150180 150301  
150358 150359 150406 150509 150535 150636 150692 151042  
151136 151351 151532 151708 151709 151782 151873 151937  
152010 152011 152055 152062 152136 152139 152296 152297  
152394 152468 152469 152487 152846 152877 153282 153434  
153472 153508 153870 154079 154082 154173 154175 154176  
154283 154284 154293 154294 154308 154326 154327 154374  
154383 154384 154520 154723 154728 154729 154765 154844  
155212 155219 155254

#### REGISTRATION OF DESIGNS

The following designs have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Design Act, 1911.

The date shown in the each entry is the date of registration of the design included in the entry

Class 3. No. 156419. Rajpal Plastic Industries, 303, Neelkanth 98, Marine Drive, Bombay 400002, Maharashtra, India, an Indian Partnership Firm. "Soap Case". 9th December, 1985.

Class 3. No. 156338. S.S. Industries, a registered Partnership Firm, of Space 15, 8th Floor, Shantiniketan, 8 Camac Street, Calcutta-700017, State of West Bengal, India. "A Clip". 22nd November, 1985.

Class 3. No. 156420. Rajpal Plastic Industries, 303, Neelkanth, 98, Marine Drive, Bombay 400002, Maharashtra, India, an Indian Partnership Firm. "Salt & Pepper Container set". 9th December, 1985.

Class 3. No. 156158. Royal Industries 3541-Qutab Road, Delhi-110006, an Indian Partnership Concern. "Set of Tray" made of Plastic. 25th October, 1985.

Class 5. No. 156154. Lion Pencils Private Limited, a company incorporated under the Provisions of Indian Companies Act, at Andrew Nagar, S.V. Road, Dahisar, Bombay-400 068, State of Maharashtra, India. "Dangler Cum Display Box". 24th October, 1985.

Class 5. No. 156155. Lion Pencils Private Limited, a company incorporated under the Provisions of Indian Companies Act, at Andrew Nagar S.V. Road, Dahisar, Bombay-400 068, State of Maharashtra, India. "Pencil Stand Cum Table Calender". 24th October, 1985.

Class 5. No. 156199. Lion Pencils Private Limited, a company incorporated under the Provisions of Indian Companies Act, at Andrew Nagar, S.V. Road, Dahisar, Bombay 400 068, State of Maharashtra, India. "Carton". 31st October, 1985.

Class 5. No. 156403. Lion Pencils Private Limited, a company incorporated under the provisions of Indian Companies Act, At Andrew Nagar, S.V. Road, Dahisar, Bombay 400 068, State of Maharashtra, India, "Ball-Pen Refill Pack". 5th December, 1985.

Class 5. No. 156500. GTC Industries Limited, a company incorporated under the provisions of Indian Companies Act, at Tobacco House, Vile Parle, Bombay 400 056, State of Maharashtra, India. "Cigarette Packet". 6th January, 1986.

Class 5. No. 156501. GTC Industries Limited, a company incorporated under the Provisions of Indian Companies Act, at Tobacco House, Vile Parle, Bombay 400 056, State of Maharashtra, India. "Cigarette Packet". 6th January, 1986.

Class 5. No. 156667. GTC Industries Limited, a company incorporated under the provisions of Indian Companies (Act) at Tobacco House, Vile Parle, Bombay 400 056, State of Maharashtra, India. "Cigarette Packet". 18th February, 1986.

R. A. ACHARYA  
Controller General of Patents, Designs and  
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